

China and India in energy and environmental politics: connecting the global and national levels

Fuchs, Doris; Glaab, Katharina

Veröffentlichungsversion / Published Version
Arbeitspapier / working paper

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:
SSG Sozialwissenschaften, USB Köln

Empfohlene Zitierung / Suggested Citation:

Fuchs, D., & Glaab, K. (2009). *China and India in energy and environmental politics: connecting the global and national levels*. Münster: Universität Münster, FB Erziehungswissenschaft und Sozialwissenschaften, Institut für Politikwissenschaft. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-257403>

Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

Terms of use:

This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.

By using this particular document, you accept the above-stated conditions of use.

Framework Paper

“China and India in Energy and Environmental Politics:

Connecting the Global and National Levels“

Doris Fuchs and Katharina Glaab

The conference “China and India in Energy and Environmental Politics” will look at the political economy of energy and environmental issues in and of China and India from a theoretical and empirical perspective. Since China and India have opened up their economies, they are in the limelight due to the fast economic growth in the last decades, which has not only been accompanied by the industrialization of these countries. It also has led to massive transformations with regard to social development, environment and consumption structures, which have enjoyed increased attention nationally and internationally. The consequences of the rapid economic growth as well as the satisfaction of new consumer needs in both countries represent dramatic energy-related and environmental challenges to China and India, themselves, as well as to the global community.

To keep their economies afloat, China and India have pursued controversial policies in the past. At the national level, they have accepted dramatic environmental degradation as a trade off for production and energy supply objectives. At the international level, China’s politics in Africa, i.e. the cooperation with violent and corrupt governments in exchange for access to energy (and mineral) resources has repeatedly caused controversy in the international community.

In the light of these global and domestic political changes, the scrutiny of the environmental trajectories of China and India becomes pertinent. A comparative investigation of China’s and India’s environmental and energy policies and politics reveals certain similarities and differences. Understanding these differences and their causes allows the political recognition of the determinants and implications of energy and environmental politics at the national and international levels. Such recognition, in turn, is needed for the development of innovative concepts to confront China’s and India’s resource demands. It can contribute to effective policy-making in both countries as well as provide a basis for international cooperation on these issues with them.

Therefore, this conference will explore both countries' energy and environmental policies and politics at the national and international levels, the interaction at different levels of governance, as well as their economic, political and cultural determinants. Particular attention will be given to similarities and differences between the issues in the two countries. In addition, the conference will investigate prospects for more sustainable development trajectories for China and India.

Given that this is a newly booming field of research, the aims of the conference are twofold. On the one side, the conference intends to give scholars room to discuss their research and exchange new insights on energy-related and environmental policies and politics in and of China and India. On the other side, the conference wants to create a sound foundation for future work in this field. To this end, it also pursues the idea of a mapping of the state of knowledge as well as needs of the field.

The Scientific Discourse

Academia and politics are highly interested in and concerned about China's and India's increasing demand for energy and the ongoing exploitation of the environment. Both countries are facing severe water and air pollution, a high energy demand, and the growth in size and income of an already large population, which will only increase consumer needs and environmental pressure. The decisive role that these Asian countries play also for global energy and environmental futures has led to a broad spectrum of scientific publications, dealing with various topics and different approaches. A cursory look at the literature identifies four particularly interesting areas of investigation on these issues; the interaction between global and national environmental politics, China's and India's role in the global energy market, the interaction between the economy and the environment, and the question of appropriate theoretical and methodological approaches to the study of energy and environmental policies and politics in and of the two countries.

The Interaction between Global and National Environmental Politics

Economic progress and the need for energy generation have entailed substantial environmental costs for China and India, and in some instances led to the promotion of environment-blind policies with disastrous effects on the national and global levels. At the same time, China and India are not only contributors to national and international pollution,

they are also affected by global environmental change. The mutual influence of global environmental agendas, such as climate change politics, and national environmental policies highlight the difficult assessment of the impact and interaction of the different levels. On a regional level, China's dust storms already affect the residents of neighbouring countries and India's neighbours are apprehensive regarding plans of interlinking rivers for instance, lifting national environmental problems to a regional level. From an international perspective, China and India are both among the biggest greenhouse gas (GHG) emitters, and further increase in global GHG emissions is likely to be led by the continuing growth of their economies (Barbier 2009).

Therefore, the integration of China and India in future environmental and in particular climate regimes is crucial for the international community. Engaging the two countries in a cooperative effort to control GHG emissions either in a post-Kyoto regime or in a regional form of environmental co-operation such as the Asia-Pacific Partnership on Clean Development and Climate, is a prerequisite for the international pursuit of sustainable development. However, not only engagement but also technological support and transfer are necessary to help China and India meet their environmental challenges. Though both countries are building up innovation capabilities (Altenburg et al. 2008), they still lag behind in the development of technologies for renewable energy generation. Here, they rely only on Western know-how, which is often limited by intellectual property rights, however, as well as the experience of already industrialized countries in general.

Under what terms and conditions can international cooperation with China and India on environmental issues be achieved, then? What national political, economic, or cultural factors influence China's and India's interest in international cooperation? How can the international community facilitate China's and India's joining of international/regional environmental agreements as well as their effective implementation of associated measures at the national level? According to Zusman, the greater the impact of environmental degradation on other states, the greater the external pressure and assistance for change in developing countries (Zusman and Turner 2005). Other scholars point to the role of international NGOs, which are not only present at international conferences but are also able to actively shape and strengthen climate and biodiversity regimes, laws and institutions by launching campaigns and challenging discourses (Princen and Finger 2003). Furthermore, while many scholars ascribe international actors an important role in fostering successful cooperation, others point to the importance of domestic developments such as national economic liberalization as an

explanatory variable (Rock 2002). Additional national and international determinants need to be systematically investigated.

Energy Needs and Security Politics

One particular area of scholarly and political interest is China's and India's energy demand and its implications for international politics in general, and security issues in particular. China and India traditionally were self-sufficient in their energy supply. Since the 1990s, however, both countries have become net importers of energy and, therefore, pivotal players on the global energy market. Scholars and public institutions attest the existence of an exponentially rising energy demand in both countries (Manning 2000; IEA International Energy Agency 2000; EIA Energy Information Administration 2006), which may lead to further competition on global energy markets. China and India are both heavily dependent on imports of fuel to sustain their energy demands. This dependency - among other factors - made the issue of energy supply rise from the realm of low politics concerned with questions of domestic economic policy to the realm of high politics dealing with questions of national security (Klare 2002; Andrews-Speed et al. 2004).

The term "energy security" reveals a strong interconnectedness between economic and security politics and reflects the influence conflicts, sanctions and resource scarcity, for example, can take on a national, secure energy supply. Consequently, China's and India's "go-out"-strategies to accumulate resources outside their countries, concentrate on an active, energy-centred, economic diplomacy, which reflect a deep mistrust of the Western dominated global energy market and vulnerability regarding safe energy access. Scholars argue that the quest for energy security has transformed both countries' foreign policy (Müller-Kraenner 2008). In this context, their co-operation with authoritarian regimes to satisfy energy needs has been of special concern to Western countries. China's and India's new-found interest in trade and investment with countries from the African continent for example is largely seen in the context of national resource allocation and criticized for its non-conditional financial support (Broadman and Isik 2007). This pursuit of national interests in international economic politics is sometimes even labelled as neo-mercantilism (Herberg and Lieberthal 2006). Other scholars challenge this discourse, however, and argue that it only serves the construction of China and India as a global security threat (Gu and Mayer 2007).

Though there seem to be striking similarities in China's and India's foreign energy politics, however, significant differences in implementation and pursuance of energy interests reveal

the importance of further research in this area. Here, the identification of similarities and differences in the politics of two relatively new players in the global energy market is necessary to strengthen knowledge on the role of industrializing countries in that market, the factors that influence their political behaviour and the potential for international cooperation in this already saturated market.

The Interaction between the Economy and the Environment

The above issues relate to the question of the interaction between the economy or economic development and the environment, of course. This question can, however, be addressed much more specifically. According to the World Bank, air and water pollution constrain the growth of China's GDP so much, that it needs to pursue an environmentally sustainable pattern of growth to increase incomes as well as environmental quality (Holtz 1998), for example. Using a different angle, research on the Environmental Kuznets Curve, which schematizes the idea that environmental quality declines with initial growth, but improves after a certain level of per capita income has been reached, postulates a strong relationship between levels of economic development and environmental quality (Grossman and Krueger 1995).

Even more interesting, especially due to its topical nature, may be research on the implications of the current global financial crisis on the environmental trajectories of China and India. The financial crisis has an enormous influence on national government programmes and politics, providing incentives to reflate the market through economic stimulus measures. Thereby, it presents both a challenge and an opportunity to governments in general, and China and India in particular, with respect to the pursuit of environmental objectives. Interestingly, United Nations Environment Programme (UNEP) reports indicate that China is using the crisis as an opportunity to invest in a more sustainable energy and environmental future. Nearly one third of China's \$586 billion stimulus package is dedicated to green projects, such as energy efficiency and environmental improvements (Barbier 2009). And even before the crisis, in 2006, India was only second to China among developing countries in investments in sustainable energy supply (ibid). Proclaiming a "global green new deal," as UNEP did, may be premature, but the green direction of economic (recovery) programmes especially in these countries is a hopeful sign for sustainable development.

But will China and India be able to make ongoing economic growth and green politics compatible? Will they, in fact, be able to strengthen their economic position with progressive

environmental policies and technological innovations? Or will economic objectives continue to trump, especially in situations in which environmental objectives are too costly?

The Adequacy of Perspectives and Approaches

The experiences of advanced, industrialized societies in Europe and the Americas often serve as a framework when analyzing processes of environmental reform in comparative studies. Yet, they fail to meet the methodological challenges faced by new forms of ecological modernization and governance of developing and industrializing societies such as in the case of Asia (Sonnenfeld and Mol 2006). Do differences in culture, role in the global political economy or time, for instance, imply the need for a correspondingly different theoretical perspective and/or methodological approach?

Likewise, one can ask the question whether the new global players can pursue a different political (and associated environmental) strategy than the path taken by the industrialized countries. Research on the Environmental Kuznets Curve (EKC) can serve as an exemplary starting point for such an argument. This research has shown that political and institutional strategies significantly influence environmental quality independently of the level of economic development (Fuchs 2003; van Griethuysen 2002). In addition, related research has highlighted the potentially important role of cultural influences such as traditional and local values, for environment and development (UN World Commission on Environment and Development 1987), which may also influence and empower the Asian environmental movement (Hsiao et al. 1999). Moreover, critical reflection on this research has asked to what extent improvements in environmental quality achieved by the industrialized countries after they had reached a certain level of development, were possible only due to the move of polluting industries to developing countries. In other words, China and India may face new opportunities but also challenges in attempts to avoid the environmental degradation that had usually accompanied economic growth (Managi and Jena 2008; Aden and Sinton 2006; Munasinghe 1999). Here further research is necessary to investigate if China and India illustrate a new case of industrializing countries that follow a new and possibly “Asian” way of sustainable development.

Finally, this area of research makes it particularly difficult to pursue and justify positivist explanatory, i.e. non-normative research. The question of equity between the developed and the developing world is difficult to ignore, especially with regard to global challenges, such as climate change. Developing countries currently are exempt from restrictions on GHG

emissions. Scholars and politicians disagree, however, as to whether Western states, who have the financial means, should take the lead in diminishing greenhouse gas emissions (Harris 2007) or whether emission reduction efforts of China and India should be commended (Zedillo 2008). Furthermore, scholars argue that not only countries have the responsibility to act, but also pollution intensive industries, that, so the argument of the Pollution Haven Hypotheses (PHH), have a natural tendency to migrate to countries with weaker environmental regulation (Bommer 1999). In general, scholars – just as politicians – need to reflect on the problem of addressing China’s and India’s environmental problems and policies, given the environmental past and ongoing responsibility of the developed countries for global environmental problems. Furthermore, as a significant part of China’s and India’s environmental degradation as well as energy use is created by the production of goods for Western markets, the questions of responsibility clearly reaches down to the national levels as well. Thus, a debate on adequate perspectives and approaches in research on China and India in energy and environmental politics needs to include a debate on the role of normative approaches as well.

While a first scanning of the literature has identified these four areas of research as particularly vibrant and interesting, at this point in time, more information on ongoing research in these areas as well as other particularly noteworthy developments in related research is needed. On the one side, more detailed insights into particularly fascinating new findings as well as research needs in each of the four areas identified above are desirable. On the other side, this list of interesting areas is by no means complete and other areas with vibrant research and further potential need to be added.

The Political Economy Perspective

Following this cursory scanning of the literature, it is clear that there is strong need for a comprehensive analysis of China’s and India’s energy and environmental policies and politics today. In such an endeavour, the international and comparative political economy perspectives suggest themselves as a promising framework. Especially the interplay of economics and politics, of markets and states, or economic interests/incentives and political regulation/control is a theme that is reflected in all of the different research areas identified above, (Strange 2003). Allowing an emphasis on different impact mechanisms and actors, the

political economy perspective offers useful analytical tools to investigate the interaction between the economy, politics and society and its forms, mechanisms and determinants.

The international and comparative political economy perspectives appear to be particularly useful for the broader topic at hand. International political economy (IPE) perspectives draw our attention to the implications of ongoing regionalization and growth processes as well as economic-political linkages. Specifically, they highlight the growing significance of China and India in relation to the hitherto existing hegemon, the United States. In addition, they link these changing power constellations to possibilities for cooperation but also potential conflicts; e.g. liberal principles as manifested in the “Washington Consensus” are increasingly challenged by more pragmatic development concepts such as the “Beijing Consensus” (Ramo 2005). Likewise, IPE perspectives draw attention to the antagonism between globalization and sustainability emphasizing the negative impacts and dangers of this resource-intense production- and development model (Bakker and Gill 2003). Finally, IPE perspectives allow the consideration of the enhanced role of non-state actors, such as civil-society, transnational corporations (TNCs) and scientific networks, relative to public actors, which is caused by globalization and the transformation of the nation-state. Specifically, in the case of China’s and India’s role in global environmental and energy politics various supra- and subnational, nonstate and state actors in environmental and energy politics can be identified that are able to exercise considerable influence.

Comparative political economy (CPE) perspectives, in turn, allow a similarly comprehensive investigation of the interaction between state and market actors and processes in specific countries. Thus, they allow the consideration of the relative influence of economic interests, power relationships, and cultural values on energy and environmental policy choices and outcomes in China and India. In this vein, they also provide an excellent basis for a systematic comparison of energy and environmental politics and policy in China and India.

Conference participants come from various disciplinary backgrounds, of course. Nevertheless, we consider the political economy perspectives a sufficiently broad and at the same time highly useful analytical tool to investigate on China’s and India’s energy and environmental politics and allow for exchange and synthesis between the individual contributions.

Questions to Be Addressed

This conference aims to explore China's and India's role in energy and environmental politics on theoretical and empirical grounds, identify similarities and differences, and inquire into the connection of global and national levels. Besides an exchange on new insights from individual research endeavours, a main objective will be a joint mapping of the state of knowledge and the most pressing and promising areas of inquiry in this research fields.

Key Questions

In pursuit of its objectives, the conference will address the following key questions, which we ask all participants to ponder in their papers and/or presentations:

Given your analysis,

- how do global agendas and national policies interact in this environmental/energy policy issue?
- do economic, political, and/or cultural factors exercise a strong influence on developments in this field?
- which actors (governments, International Governmental Organisations, transnational corporations and/or civil society) exercise a strong influence on developments in this field?
- what political and scientific innovations are necessary to meet China's and India's (and therefore the world's) energy and environmental problems in this field?

The following table may provide a master for gathering the answers to these questions:

Mapping the Field and Locating your Paper:

Research issue	Most important insights	Global → national influence	National → global influence	Important economic, political, cultural factors	Important actors (and why)	Other factors	Research Needs	Similarities/ Differences between China and India ¹

¹ In the case, that this comparison is not part of your analysis, we would like to ask you to speculate what a comparison might show.

In our mapping of the state of knowledge and research needs at the conference, we also would like to gather information on the following questions:

- What are similarities and differences of China's and India's energy and environmental problems and the solutions pursued? What are the causes of these similarities and differences?
- What role do China and India play in global energy and environmental politics? What are similarities and differences here?
- What are the most pressing research needs with respect to China's and India's role in energy and environmental politics?

By providing a first set of answers to these questions, the conference will serve to guide further research on the topic of China and India in energy and environmental politics and provide important insights for global and national environmental politics and policy.

Format

As pointed out above, the aim of the proposed conference is to improve our understanding of the field through the presentation of individual research insights as well as a mapping of the state of knowledge and the identification of research needs and promising innovative perspectives. These objectives will be pursued through an intensive international and interdisciplinary exchange. To that end, the conference will bring together international scholars from a variety of disciplines, foster an exchange between conceptual papers and empirical analyses, and place a heavy emphasis on discussion and within-conference-progress rather than the mere presentation of papers. Specifically, the format will stress the discussion of papers and allot a substantial share of time to debate to create a stimulating space for innovative ideas and concepts. Attendees should expect to participate in and contribute to vibrant plenary discussions and small, intensive working groups.

Next to the substantive dimension, the conference aims to foster the further development of an international research network on the issues of energy and environment in China and India. Bringing together researchers from various regional as well as disciplinary backgrounds, the

conference seeks to provide a fertile ground for discussion and exchange as well as future co-operation.

References

- Aden, Nathaniel T., and Jonathan E. Sinton. 2006. "Environmental Implications of Energy Policy in China." *Environmental Politics* 15 (2): 248–70.
- Altenburg, Tilman, Hubert Schmitz, and Andreas Stamm. 2008. "Breakthrough? China's and India's Transition from Production to Innovation." *World Development* 36 (2): 325–44.
- Andrews-Speed, Philipp, Xuanli Liao, and Roland Dannreuther. 2004. "Searching for Energy Security. The Political Ramifications of China's International Energy Policy." *China Environment Series* (5): 13–44.
- Bakker, Isabella, and Stephen Gill, eds. 2003. *Power, Production and Social Reproduction. Human In/Security in the Global Political Economy*. Basingstoke, Hampshire: Palgrave/Macmillan.
- Barbier, Edward. 2009. *A Global Green New Deal. Report prepared for the Economics and Trade Branch, Division of Technology, Industry and Environment, United Nations Environment Programme*.
- Bommer, Rolf. 1999. "Environmental Policy and Industrial Competitiveness: The Pollution Haven Hypothesis Reconsidered." *Review of International Economics* 7 (2): 342–55.
- Broadman, Harry G., and Gozde Isik. 2007. *Africa's Silk Road. China and India's New Economic Frontier*. Washington, DC: World Bank.
- EIA Energy Information Administration. 2006. *International Energy Outlook*. Washington D.C.
- Fuchs, Doris. 2003. *An Institutional Basis for Environmental Stewardship. The Structure and Quality of Property Rights*. Dordrecht: Kluwer Academic Publisher.
- Grossman, Gene M., and Alan B. Krueger. 1995. "Economic Growth and the Environment." *Quarterly Journal of Economics*: 353–77.
- Gu, Xuewu, and Maximilian Mayer. 2007. *Chinas Energiehunger: Mythos oder Realität?* München: Oldenbourg.
- Harris, Paul G., ed. 2007. *Europe and Global Climate Change. Politics, Foreign Policy and Regional Cooperation*. Cheltenham: Elgar.

- Herberg, Mikkal E., and Kenneth Lieberthal. 2006. "China's Search for Energy Security: Implications for U.S. Policy." *NBR Analysis* 17 (1).
- Holtz, Paul. 1998. *Clear Water, Blue Skies. China's Environment in the New Century*. Washington, DC: World Bank.
- Hsiao, Hsin-Huang Michael, On-Kwok Lai, Hwa-Jen Liu, Francisco A. Magno, Laura Edles, and Alvin Y. So. 1999. "Culture and Asian Styles of Environmental Movements." In *Asia's Environmental Movements. Comparative Perspectives*, ed. Yok-Shiu F. Lee. Armonk, NY: Sharpe, 210–29.
- IEA International Energy Agency. 2000. *China's Worldwide Quest for Energy Security*. Paris.
- Klare, Michael T. 2002. *Resource Wars. The New Landscape of Global Conflict*. New York: Henry Holt and Company.
- Managi, Shunsuke, and Pradyot Ranjan Jena. 2008. "Environmental Productivity and Kuznets Curve in India." *Ecological Economics* 65 (2): 432–40.
- Manning, Robert A. 2000. "The Asian Energy Predicament." *Survival* 42 (3): 73–88.
- Müller-Kraenner, Sascha. 2008. *China's and India's Emerging Energy Foreign Policy*. Deutsches Institut für Entwicklungspolitik. Bonn. Discussion Paper. 15.
- Munasinghe, Mohan. 1999. "Is Environmental Degradation an Inevitable Consequence of Economic Growth?: Tunneling Through the Environmental Kuznets Curve." *Ecological Economics* (29): 89–109.
- Princen, Thomas, and Matthias Finger, eds. 2003. *Environmental NGOs in World Politics. Linking the Local and the Global*. London: Routledge.
- Ramo, Joshua Cooper. 2005. *The Beijing Consensus*. London: Foreign Policy Centre.
- Rock, Michael T. 2002. *Pollution Control in East Asia. Lessons From the Newly Industrializing Economies*. Washington, DC: RFF Press [et. al.].
- Sonnenfeld, David A., and Arthur P. J. Mol. 2006. "Environmental Reform in Asia: Comparisons, Challenges, Next Steps." *The Journal of Environment Development* 15 (2): 112–37.
- Strange, Susan. 2003. *States and Markets*. London et. al.: Continuum.
- UN World Commission on Environment and Development. 1987. *Our Common Future*. Oxford: Oxford University Press.

van Griethuysen, Pascal. 2002. "Sustainable Development: An Evolutionary Economic Approach." *Sustainable Development* (10): 1–11.

Zedillo, Ernesto, ed. 2008. *Global Warming. Looking Beyond Kyoto*. Washington, DC: Brookings Institution Press.

Zusman, Eric, and Jennifer L. Turner. 2005. "Beyond the Bureaucracy. Changing China's Policymaking Environment." In *China's Environment and the Challenge of Sustainable Development*, ed. Kristen A. Day. Armonk, NY: Sharpe.